

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

CLAIMS

1 (Currently Amended) A computer device having a system for simulating tactile control over a document, comprising

a processor, memory, and a display,

system code stored within the memory and adapted to be executed by the processor to provide a digital representation of a document including data content and a page structure representative of a page layout of the document,

a rendering engine for rendering an image of at least a portion of the page layout of the digital representation on the display,

a display monitor for detecting movement of an object across the display,

an interface process for comparing properties of the detected movement to properties of a set of predefined movements associated with a set of user interface commands for manipulating and viewing documents to identify an input of a user interface command processing a detected movement of an object across the image presented on the display to identify a motion representative of a command to alter the image, the identification of the user interface command being independent of visible elements on the display; and

a navigation module for navigating through the digital representation of the document by responsive to the interface process for changing the rendered portion of the page layout in response to an identification by the interface process of an inputted user interface command, wherein altering the rendered portion of the page layout allows a user to navigate through the digital representation of the document.

2 (Currently Amended) A computer device according to claim 1, wherein the display comprises a touch-sensitive screen, and

~~the interface process includes a screen monitor to monitor the touch sensitive screen for detecting movement across a surface of the touch sensitive screen.~~

3 (Currently Amended) A computer device according to claim 1, wherein the display comprises a display screen capable of depicting a cursor and wherein the object moving across the display is the cursor~~capable of detecting movement of the cursor across a surface of the display screen and depicting the cursor movement.~~

4 (Currently Amended) A computer device according to claim 1, ~~the computer device~~ further comprising a tactile input device selected from the group consisting of touch-pad, joystick, mouse, trackball and thumb wheel device, wherein the display indicates movement generated by the tactile device.

5 (Original) A computer device according to claim 1, wherein the processor, memory, and display are arranged as a data processing platform for a device selected from the group consisting of a hand-held computer, a telephone, a mobile data terminal, a set top box, an embedded processor, a notebook computer, a computer workstation, a printer, a copier, a facsimile machine, an in-car system, a domestic appliance, an audio player, a microwave oven, a washing machine, and a refrigerator.

6 (Currently Amended) A computer device according to claim 12, further including a velocity detector for determining a velocity vector associated with the ~~identified detected movement~~identified motion.

7 (Currently Amended) A computer device according to claim 6, further comprising means for applying a velocity characteristic to a document within ~~the~~a display.

8 (Currently Amended) A computer device according to claim 7, wherein the means for applying a velocity characteristic includes means for causing the rendered image to move across the screen~~display~~ at a velocity associated with the determined velocity vector.

9 (Currently Amended) A computer device according to claim 1, wherein the interface process includes a page-flip detector capable of responding to the ~~identified motion~~detected movement.

10 (Original) A computer device according to claim 9, wherein the page-flip detector includes means for causing the rendering engine to render an alternate page within the page layout of the digital representation of the document.

11 (Currently Amended) A computer device according to claim 9, further comprising ~~wherein the tactile input device includes~~ an input device selected from the group consisting of a touch-sensitive display, a touch-pad, a joystick, a mouse, a trackball and a thumb wheel device.

12 (Currently Amended) A computer device according to claim 9, wherein the navigation module responds to the page-flip detector by ~~for~~ rendering another portion of the page layout adjacent a currently rendered portion.

13 (Original) A computer device according to claim 12, wherein the other rendered portion of the page layout has a selected adjacency to the currently rendered portion.

14 (Original) A computer device according to claim 1, wherein the navigation module includes a page curl detector for rendering, adjacent a currently rendered portion, another portion of the page layout representative of a portion of an underlying page.

15 (Original) A computer device according to claim 14, wherein the other rendered portion of the page layout has a selected adjacency to the currently rendered portion.

16 (Currently Amended) A computer device according to claim 1, wherein the interface process includes a gesturing process for detecting-identifying a ~~predefined~~ movement representative of a command for selecting a portion of the page layout to be rendered.

17 (Currently Amended) A computer device according to claim 1, wherein the interface process includes a gesturing process for detecting-identifying a ~~predefined~~ movement representative of a command for altering data content of the digital representation of the document.

18 (Currently Amended) A computer device according to claim 1, wherein the interface process

includes a page-zoom detector for ~~detecting~~ identifying a ~~predefined~~ movement representative of a command for changing a scale of the display.

19 (Currently Amended) A computer device according to claim 18, wherein the page-zoom detector ~~detects~~ identifies a velocity characteristic of the ~~predefined~~ movement, and the scale of the display changes as a function of the velocity characteristic with a predefined inertia.

20 (Original) A computer device according to claim 1, wherein the navigation module further includes means for rendering a page layout as a function of an underlying page layout, for providing context-responsive rendering of content.

21 (Currently Amended) A computer device according to claim 20, wherein ~~the means for~~ rendering engine includes means for rendering page layout features and user interface controls while in an active state.

22 (Original) A computer device according to claim 1, further including
means for controlling a transparency characteristic of a document presented on the display.

23 (Original) A computer device according to claim 22, further including
means for controlling a transparency characteristic of selected portions of the document for adjusting visibility of the selected portions relative to other portions of the document.

24 (Currently Amended) A computer device according to claim 4, wherein a velocity detector ~~process-determines~~ a page velocity during a document drag operation controlled by movement of the tactile input device and wherein the navigation module ~~process-employs~~ the determined page velocity ~~determination~~ to redraw the document in a series of pictures that portray the document as moving across the screen.

25 (Original) A computer device according to claim 24, further including means for measuring a magnitude of the page velocity and redrawing the image as a function of measured magnitude.

26 (Original) A computer device according to claim 24, further including means for measuring a direction of the page velocity and for redrawing the image as a function of measured direction.

27 (Currently Amended) A computer device according to claim 4, wherein a velocity detector ~~process~~ determines a page velocity during a document drag operation controlled by movement of the tactile input device and wherein, upon release of said tactile input device from the document, a displayed image of the page continues to move in a direction established by the page velocity determination.

28 (Original) A computer device according to claim 27, wherein, following release of said tactile input device from the document, said displayed image of the page continues to move in said direction until it is stopped by a user action.

29 (Original) A computer device according to claim 27, wherein, following release of said tactile input device from the document, the page velocity decreases by a constant page inertia until it reaches zero.

30 (Original) A computer device according to claim 28, wherein the page velocity is variable in response to movement of said tactile input device.

31 (Currently Amended) A computer device according to claim 4, wherein a velocity detector ~~process~~ determines a page velocity during a document drag operation controlled by movement of the tactile input device and for multi-page documents, the page velocity is used for panning different pages of a document across the screen at a rate determined by a page velocity set by dragging one page of the document.